WHAT IS CLAIMED:

1. For a factory process comprising a plurality of tasks, a method to permit monitoring of the process, the method comprising:

displaying the factory process in real-time as a three-dimensional, free-camera, computer generated representation of the process as a whole; and

selectively displaying each of the tasks in real-time as a three-dimensional, free-camera, computer generated representation of the respective task.

2. The method of claim 1 including selectively displaying data representative of a status of the displayed process.

3. The method of claim 1 including selectively displaying data representative of a status of one of the displayed tasks.

4. The method of claim 1 including selectively displaying data representative of a status a plurality of the displayed tasks.

5. The method of claim 1 wherein the process has a controllable parameter and the method includes controlling the parameter of the factory process.

6. The method of claim 1 wherein one of the tasks has a controllable parameter and the method includes controlling the controllable parameter of the task.

7. The method of claim 1 wherein a plurality of the tasks have a controllable parameter and the method includes selectively controlling the controllable parameter of each of the tasks.

8. The method of claim 1 wherein one of the tasks has a sub-task and the method includes selectively displaying the sub-task in real-time as a three-dimensional, free-camera, computer generated representation of the respective task.

9. The method of claim 8 wherein the sub-task has a controllable parameter and the method includes controlling the controllable parameter of the sub-task.

10. The method of claim 1 wherein a plurality of the tasks has a respective plurality of sub-tasks and the method includes selectively displaying the sub-tasks in real-time as a three-dimensional, free-camera, computer generated representation of the respective sub-tasks.

11. The method of claim 10 wherein each of the sub-tasks has a controllable parameter and the method includes controlling the controllable parameter of the sub-tasks.

12. The method of claim 1 including:
sensing a status of one of the tasks;
determining if the sensed status is acceptable; and
automatically displaying the task if the sensed status is not acceptable.

13. The method of claim 1 including:
sensing a status of a plurality of the tasks; and
determining if the sensed status of each of the plurality of tasks is acceptable; and
automatically displaying one of the plurality of tasks if the sensed status of the one of the plurality of tasks is determined not to be acceptable.

14. For a factory process comprising a plurality of tasks, a method to permit monitoring of the process, the method comprising:

displaying the factory process in real-time as a three-dimensional, free-camera, computer generated representation of the process as a whole;

selecting one of the tasks; and

displaying data representative of a status of the selected one of the displayed tasks.

15. The method of claim 14 including displaying data representative of a status of a plurality of the displayed tasks.

16. The method of claim 14 wherein the process has a controllable parameter and the method includes controlling the parameter of the factory process.

17. The method of claim 14 wherein the one of the displayed tasks has a controllable parameter and the method includes controlling the controllable parameter of the task.

18. The method of claim 14 wherein the plurality of tasks has a controllable parameter and the method includes controlling the controllable parameter of each of the tasks.

19. The method of claim 14 wherein one of the tasks has a sub-task and the method includes selectively displaying the sub-task in real-time as a three-dimensional, free-camera, computer generated representation of the respective task.

20. The method of claim 19 wherein the sub-task has a controllable parameter and the method includes controlling the controllable parameter of the sub-task.

21. The method of claim 14 wherein a plurality of the tasks has a respective plurality of sub-tasks and the method includes selectively displaying the sub-tasks in real-

time as a three-dimensional, free-camera, computer generated representation of the respective sub-tasks.

22. The method of claim 21 wherein each of the sub-tasks has a controllable parameter and the method includes controlling the controllable parameter of the sub-tasks.

23. For a factory process comprising a plurality of tasks, a computer readable medium containing program instructions for execution by a processor to cause the processor to perform steps to permit monitoring of the process on a video display, the method comprising:

displaying the factory process in real-time as a three-dimensional, free-camera, computer generated representation of the process as a whole; and

selectively displaying each of the tasks in real-time as a three-dimensional, free-camera, computer generated representation of the respective task.

24. The method of claim 23 including selectively displaying data representative of a status of the displayed process.

25. The method of claim 23 including selectively displaying data representative of a status of one of the displayed tasks.

26. The method of claim 23 including selectively displaying data representative of a status a plurality of the displayed tasks.

27. The method of claim 23 wherein the process has a controllable parameter and the method includes controlling the parameter of the factory process.

28. The method of claim 23 wherein one of the tasks has a controllable parameter and the method includes controlling the controllable parameter of the task.

29. The method of claim 23 wherein a plurality of the tasks have a controllable parameter and the method includes selectively controlling the controllable parameter of each of the tasks.

30. The method of claim 23 wherein one of the tasks has a sub-task and the method includes selectively displaying the sub-task in real-time as a three-dimensional, free-camera, computer generated representation of the respective task.

31. The method of claim 30 wherein the sub-task has a controllable parameter and the method includes controlling the controllable parameter of the sub-task.

32. The method of claim 23 wherein a plurality of the tasks has a respective plurality of sub-tasks and the method includes selectively displaying the sub-tasks in real-time as a three-dimensional, free-camera, computer generated representation of the respective sub-tasks.

33. The method of claim 32 wherein each of the sub-tasks has a controllable parameter and the method includes controlling the controllable parameter of the sub-tasks.

34. The method of claim 23 including:
sensing a status of one of the tasks;
determining if the sensed status is acceptable; and
automatically displaying the task if the sensed status is not acceptable.

35. The method of claim 23 including:
sensing a status of a plurality of the tasks; and
determining if the sensed status of each of the plurality of tasks is acceptable; and

automatically displaying one of the plurality of tasks if the sensed status of the one is determined not to be acceptable.

36. A system for monitoring a factory process, the factory process comprising a plurality of tasks, a system comprising:

means for displaying the factory process in real-time as a three-dimensional, free-camera, computer generated representation of the process as a whole; and

means for selectively displaying each of the tasks in real-time as a three-dimensional, free-camera, computer generated representation of the respective task.

37. The system of claim 36 including means for selectively displaying data representative of a status of the displayed process.

38. The system of claim 36 including means for selectively displaying data representative of a status of one of the displayed tasks.

39. The system of claim 36 including means for selectively displaying data representative of a status a plurality of the displayed tasks.

40. The system of claim 36 wherein the process has a controllable parameter and the system includes means for controlling the parameter of the factory process.

41. The system of claim 36 wherein one of the tasks has a controllable parameter and the system includes means for controlling the controllable parameter of the task.

42. The system of claim 36 wherein a plurality of the tasks have a controllable parameter and the system includes means for selectively controlling the controllable parameter of each of the tasks.

43. The system of claim 36 wherein one of the tasks has a sub-task and the system includes means for selectively displaying the sub-task in real-time as a three-dimensional, free-camera, computer generated representation of the respective task.

44. The system of claim 43 wherein the sub-task has a controllable parameter and the system includes means for controlling the controllable parameter of the sub-task.

45. The system of claim 36 wherein a plurality of the tasks has a respective plurality of sub-tasks and the system includes means for selectively displaying the sub-tasks in real-time as a three-dimensional, free-camera, computer generated representation of the respective sub-tasks.

46. The system of claim 45 wherein each of the sub-tasks has a controllable parameter and the system includes means for controlling the controllable parameter of the sub-tasks.

47. The system of claim 36 including:
means for sensing a status of one of the tasks;
means for determining if the sensed status is acceptable; and
means for automatically displaying the task if the sensed status is not acceptable.

48. The system of claim 36 including:
means for sensing a status of a plurality of the tasks; and
means for determining if the sensed status of each of the plurality of tasks is acceptable; and
means for automatically displaying one of the plurality of tasks if the sensed status of the one is determined not to be acceptable.

49. For a factory process comprising a plurality of tasks, wherein both the factory process and the tasks include controllable parameters, a method to permit monitoring and control of the process, the method comprising:

displaying the factory process in real-time as a three-dimensional, free-camera, computer generated representation of the process as a whole;

selectively displaying data representative of a status of the displayed process;

selectively controlling the factory process parameter;

selectively displaying each of the tasks in real-time as a three-dimensional, free-camera, computer generated representation of the respective task;

selectively displaying data representative of a status a plurality of the displayed tasks; and

selectively controlling the controllable parameter of each of the tasks

50. The method of claim 49 wherein one of the tasks has a sub-task and the method includes selectively displaying the sub-task in real-time as a three-dimensional, free-camera, computer generated representation of the respective task.

51. The method of claim 50 wherein the sub-task has a controllable parameter and the method includes controlling the controllable parameter of the sub-task.

52. The method of claim 50 wherein a plurality of the tasks has a respective plurality of sub-tasks and the method includes selectively displaying the sub-tasks in real-time as a three-dimensional, free-camera, computer generated representation of the respective sub-tasks.

53. The method of claim 52 wherein each of the sub-tasks has a controllable parameter and the method includes controlling the controllable parameter of the sub-tasks.

54. The method of claim 50 including:

sensing a status of one of the tasks;

determining if the sensed status is acceptable; and

automatically displaying the task if the sensed status is not acceptable.

55. The method of claim 50 including:

sensing a status of a plurality of the tasks; and

determining if the sensed status of each of the plurality of tasks is acceptable; and

automatically displaying one of the plurality of tasks if the sensed status of the one is determined not to be acceptable.